## In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Original) A recombinant viral construct comprising an avipox viral vector or functional derivative thereof which incorporates a first nucleic acid molecule encoding one or more HIV antigens or derivatives thereof and a second nucleic acid molecule encoding a cytokine or functional derivative thereof wherein said recombinant viral construct is effective in inducing, enhancing or otherwise stimulating an immune response to said HIV antigen.
- 2. (Original) The recombinant viral construct according to claim 1 wherein said HIV is HIV-1.
- 3. (Original) The recombinant viral construct according to claim 2 wherein said HIV-1 antigen is Gag and/or Pol.
- 4. (Original) The recombinant viral construct according to claims 1, 2 or 3 wherein said cytokine is  $\gamma$ -interferon.
- 5. (Original) The recombinant viral construct according to claims 1, 2 or 3 wherein said cytokine is IL-2.
- 6. (Original) The recombinant viral construct according to anyone of claims 1-5 wherein said avipox virus is fowl pox virus.
- 7. (Original) The recombinant viral construct according to anyone of claims 1-5 wherein said avipox virus is canary pox virus.
  - 8. (Original) The recombinant viral construct according to claim 1 wherein said

avipox viral vector is fowl pox virus, said HIV -1 antigens are Gag and/or Pol and said cytokine is  $\gamma$ -interferon.

- 9. (Original) A vaccine composition comprising an avipox viral vector or functional derivative thereof which incorporates a first nucleic acid molecule encoding one or more HIV antigens or derivatives thereof and a second nucleic acid molecule encoding a cytokine or functional derivative thereof wherein said recombinant viral construct is effective in inducing, enhancing or otherwise stimulating an immune response to said HIV antigen.
- 10. (Original) The vaccine composition according to claim 9 wherein said HIV is HIV-1.
- 11. (Original) The vaccine composition according to claim 10 wherein said HIV-1 antigen is Gag and/or Pol.
- 12. (Original) The vaccine composition according according to claims 9, 10 or 11 wherein said cytokine is  $\gamma$ -interferon.
- 13. (Original) The vaccine composition according to claims 9, 10 or 11 wherein said cytokine is IL-2.
- 14. (Original) The vaccine composition according to any one of claims 9-13 wherein said avipox virus is fowl pox virus.
- 15. (Original) The vaccine composition according to anyone of claims 9-13 wherein said avipox virus is canary pox virus.
- 16. (Original) The vaccine composition according to claim 9 wherein said avipox viral vector is fowl pox virus, said HIV-1 antigens are Gag and/or Pol and said cytokine is  $\gamma$ -interferon.

- 17. (Original) A pharmaceutical composition comprising the recombinant viral construct according to any one of claims 1-8 together with one or more pharmaceutically acceptable carriers and/or dilutents.
- 18. (Original) A method of inducing, enhancing or otherwise stimulating, in a mammal, an immune response to HIV said method comprising administering to said mammal an effective amount of the viral construct according to anyone of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.
  - 19. (Original) The method according to claim 18 wherein said HIV is HIV-1.
- 20. (Original) The method according to claim 19 wherein said viral construct is a viral construct according to claim 3.
- 21. (Original) A method of inducing, enhancing or otherwise stimulating, in a mammal, an immune response to HIV said method comprising administering to said mammal an effective amount of the vaccine composition according to any one of claims 9-16 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.
  - 22. (Original) The method according to claim 21 wherein said HIV is HIV-1.
- 23. (Original) The method according to claim 22 wherein said vaccine composition is a composition according to claim 11.
- 24. (Original) A method of treating a mammal, said method comprising administering to said mammal an effective amount of the viral construct according to any one of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate

an immune response to one or more HIV antigens.

- 25. (Original) The method according to claim 24 wherein said HIV is HIV-1.
- 26. (Original) The method according to claim 25 wherein said viral construct is a viral construct according to claim 3.
- 27. (Original) A method of treating a mammal, said method comprising administering to said mammal an effective amount of the vaccine composition according to any one of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.
  - 28. (Original) The method according to claim 27 wherein said HIV is HIV-1.
- 29. (Original) The method according to claim 28 wherein said viral construct is a viral construct according to claim 3.
- 30. (Original) A method for the treatment and/or prophylaxis of HIV infection or AIDS in a mammal said method comprising administering to said mammal an effective amount of the recombinant viral construct according to anyone of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.
  - 31. (Original) The method according to claim 30 wherein said HIV is HIV-1.
- 32. (Original) The method according to claim 31 wherein said viral construct is a viral construct according to claim 3.
- 33. (Original) A method for the treatment and/or prophylaxis of HIV infection or AIDS in a mammal said method comprising administering to said mammal an effective amount

of the vaccine composition according to anyone of claims 9-16 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.

- 34. (Original) The method according to claim 33 wherein said HIV is HIV-1.
- 35. (Original) The method according to claim 34 wherein said vaccine composition is a composition according to claim 11.
  - 36-37. (Cancelled).
- 38. (Original) An agent useful for inducing, enhancing or otherwise stimulating, in a mammal, an immune response to HIV said agent comprising a recombinant viral construct according to any one of claims 1-8.